Perspective on Sensory Deprivation Techniques

G. I. Wilson
Abstract

The impact of sensory deprivation on physical and mental well-being is of great interest to mental health and legal professionals, especially as it pertains to solitary confinement, supermax housing units, and isolation. Extreme sensory deprivation and solitary confinement may result in hallucinations and cognitive miscues eroding one’s ability to participate in judicial proceedings, interviews, interrogations, or even fact-finding efforts. Forensic professionals must not lose sight of the dark side of sensory deprivation techniques.
Sensory Deprivation and Solitary Confinement

Solitary confinement, according to Dr. Stuart Grassian (2006), is the confinement of “a prisoner alone in a cell for all, or nearly all, of a day with minimal stimulation and minimal opportunity for social interaction – can cause severe psychiatric harm.” It is known that severe restriction of environmental and social stimulation profoundly diminishes cognitive functions (Grassian, 2006, p. 327). Prolonged solitary confinement has a sensory deprivation wake, which is devastating and aptly described as grossly debilitating and psychologically decomposing. “It’s an awful thing, solitary,” U.S. Senator John McCain wrote of his five and a half years as a prisoner of war in Vietnam, where he spent more than two years in isolation and solitary confinement (Gawande, 2009, p. 1).

“It crushes your spirit and weakens your resistance more effectively than any other form of mistreatment.” And this comes from a man who was beaten regularly; denied adequate medical treatment for two broken arms, a broken leg, and chronic dysentery; and tortured to the point of having an arm broken again. A U.S. military study of almost a hundred and fifty naval aviators returned from imprisonment in Vietnam, many of whom were treated even worse than McCain, reported that they found social isolation to be as torturous and agonizing as any physical abuse they suffered (p 1).

Social isolation and solitary confinement bring with them “the loss of physical awareness caused by detachment from external sensory stimuli (e.g. solitary confinement). The FM 2-22.3/FM 34-52 Human Intelligence Collector Operations manual of 2006 defines sensory deprivation as “an arranged situation causing significant psychological distress due to a prolonged absence, or significant reduction, of the usual external stimuli and perceptual opportunities.”

Nonetheless, the Army manual (FM 2-22.3/FM 34-52 Human Intelligence Collector Operations, 2006) carefully distinguishes “separation” from sensory deprivation:

The purpose of separation is to deny the detainee the opportunity to communicate with other detainees in order to keep him from learning counter-resistance techniques or gathering new information to support a cover story, decreasing the detainee’s resistance to interrogation. Separation does not constitute sensory deprivation, which is prohibited… Physical separation is the best and preferred method of separation. As a last resort, when physical separation of detainees is not feasible, goggles or blindfolds and earmuffs may be utilized as a field expedient method to generate a perception of separation… Physical Separation: Prevent the detainee from communicating with other detainees (which might increase the detainee’s resistance to interrogation) and foster a feeling of futility. Field Expedient Separation: Prolong the shock of capture. Prevent the detainee from communicating with other detainees (which might increase the detainee’s resistance to interrogation) and foster a feeling of futility (p. M-8).

Solitary confinement is a sensory deprivation technique. Further, sensory deprivation goes hand in hand with separation and solitary confinement techniques. The features of sensory deprivation, separation, and solitary confinement are intimately related and overlap.

Sensory deprivation, when associated with isolation, separation, and solitary confinement, is seen as precipitating psychological disorders. These psychological disorders may express themselves as panic, mental confusion, depression, hallucinations, extreme anxiety, bizarre thoughts, and anti-social behavior (Elsevier, 2009; Dr. S. Grassian, personal communication, February 15, 2009; FM 2-22.3/FM 34-52 Human Intelligence Collector Operations, 2006 ).

It’s clear that sensory deprivation techniques, including solitary confinement, foster disturbing psychological, behavioral, and physical
effects with negative consequences. The impact of sensory deprivation on incarcerated suspects, criminals, and terrorists has captured the attention of the media along with that of academic, medical, human rights, and legal communities (Grassian, 2006; Grassian, 1983). For example, journalists cover how terrorist detainees are being held in prolonged seclusion and solitary confinement. The news is also dotted with examples of isolation tactics, techniques, and procedures (TTPs) in the U.S. prison populations used to control gang members.

Historically, solitary confinement in the U.S legal system dates back approximately 180 years. “Quaker philosophy inspired the practice with disastrous results” (Sullivan, 2006, 1-2). In 1890, the U.S. Supreme Court acknowledged the psychiatric trauma caused by prolonged solitary confinement. Over the last 20 years, sensory deprivation techniques (e.g. solitary confinement, administrative segregation, and isolation) have flourished in U.S. prison systems. “The 1990s witnessed a boom in the construction of full-blown segregation facilities (e.g. supermax isolation units) just for solitary confinement” (Sullivan, 2006, 1-2):

**Isolation today means 23 hours a day in a concrete cell no bigger than a bathroom. One hour a day is spent alone in a concrete exercise pen, about the length and width of two cars. Most inmates held in solitary have no contact with the outside world other than the U.S. mail. Depending on the state, inmates have limited access to visitors. Most can’t watch television, call anyone on the phone or even touch another person while in the units.**

The perils and liabilities of prolonged sensory deprivation are documented in studies such as those by Grassian and others (Greene, Heilbronn, Fortune, & Nietzel, 2007; Richey, 2007; Grassian, 2006; Grassian, 1983). Warren Richey (2007) discusses how 1950s and 60s research on sensory deprivation in the CIA and Defense Department gave U.S. government agencies great pause. The findings from that investigative research are reflected in the CIA’s 1963 handbook, KUBARK Counterintelligence Interrogation, complete with an ominous warning and “profound moral objection” to applying duress past the point of irreversible psychological damage” (CIA KUBARK 1963, p. 84; Richey, 2007, p. 2).

**Legal Issue of Sensory Deprivation**

While the U.S. Army Field Manual on Interrogation (2006), prohibits and restricts the use of sensory deprivation, the Supreme Court over time expresses little concern regarding the use of sensory deprivation techniques, particularly when it comes to U.S. prison systems (Haney & Zimbardo, 1998, p. 709-727; Smith, 2008, p. 61). The Supreme Court focuses “less on prison conditions themselves and more on the justifications of the prison officials” when it comes to solitary confinement and sensory deprivation (Greene, Heilbrun, Fortune, & Nietzel, 2007, p. 445). Greene, Heilbrun, Fortune, & Nietzel (2007) note prison officials’ rationalizations and justifications for the use of any number of extreme measures, showing how these measures are generally accepted with almost no reservations by judges:

In Bass v. Perrin (1999), for example, the federal court accepts a Florida prison administrator’s explanation for keeping two prisoners in solitary confinement for two years. The official claims both men were serious security risks: One had killed a guard, and the other attempted to escape five times. It is only at the extreme – where the use of force or conditions of confinement “shock the conscience” – that a judge will interfere with the administration of a prison (p. 445).

Within the U.S. criminal justice system, solitary confinement and isolation are accepted legal forms of sensory deprivation (Bartol & Bartol, 2005):
Prison inmates may be physically isolated or segregated from the general prison population for a variety of reasons and under a wide range of circumstances... we can identify the following main categories: (1) isolation or segregation as a form of punishment; (2) isolation or segregation for an inmate’s own protection; and (3) administrative segregation done for management purposes... administrative segregation has taken on new meaning, with the placement of large groups of inmates in high-security-ultramax-facilities (p. 541).

The effects of solitary confinement on the mental faculties of detainee José Padilla offers a case study into sensory deprivation techniques, psychology, and the law. J.S Martinez, a law professor at Stanford University, follows the José Padilla case. Martinez pays special note to how Padilla was initially arrested on May 8, 2002 in Chicago, then incarcerated, then declared an enemy combatant, and eventually turned over to the military for trial. All the while Padilla was isolated and held in solitary confinement (Martinez, 2007).

Padilla was subsequently convicted in a federal court (not a military court) in 2007. At the time of Padilla's conviction Martinez wrote about Padilla's subjection to prolonged sensory deprivation techniques, graphically underscoring how Padilla was denied “for nearly two years all access to his lawyers, his family and the court system” (Martinez, 2007, p. A23).

The administration claimed that he could be held without trial until the end of its "war on terror." Allowing Padilla to talk to a lawyer or know that a court was considering his case, the government argued, would threaten national security. Meanwhile, the government was working to create a relationship of complete “dependency” between Padilla and his interrogators. And simultaneously the interrogators were busy trying to “rigorously extract” a confession out of him. As court filings indicate, Padilla was subjected to sleep deprivation, stress positions and extreme temperatures. Worse, he was held without human contact, without a clock or even natural light with no way to know how quickly or slowly time was passing. When he was removed from his cell to visit a dentist, goggles and earmuffs were placed on him. Psychologists have long reported that extreme sensory deprivation is one of the quickest ways to drive people mad and make them willing to confess to anything (p. A23).
Despite the overwhelming evidence that sensory deprivation techniques are deleterious to mental and physical health, the courts sidestepped the matters of sensory deprivation techniques, their negative impacts on wellness and the ability to defend one’s self in trial. Interestingly, as courts avoid addressing sensory deprivation, they also condone medicating individuals to produce the mental status whereby defendants are rendered competent to stand trial.

Quite noticeably, the courts exercise a “compulsion” to look the other way when dealing with issues surrounding sensory deprivation. Padilla’s civil suit was sustained by a U.S. district judge in California in 2009. Eventually, in May of 2012 the 9th Circuit Court of Appeals tossed out Padilla’s case. The question remains, however, for forensic professionals: what were the psychological and physical effects on Padilla from prolonged subjection to sensory deprivation techniques and torture (Cassel, 2008):

The suit also draws a connection between Padilla’s treatment as an “enemy combatant” and his criminal conviction in Miami, arguing that the tactics used in his detention made him unable to effectively contribute to his own defense. The suit sets forth specific allegations of torture, including the use of mind-altering drugs, the stress position, and sleep and sensory deprivation (3).

Again, the courts tend to exercise a “compulsion” to look the other way when dealing with issues surrounding sensory deprivation. Padilla’s civil suit was sustained by a U.S. district judge in California in 2009. Eventually, in May of 2012 the 9th Circuit Court of Appeals tossed out Padilla’s case. The question remains, however, for forensic professionals: what were the psychological and physical effects on Padilla from prolonged subjection to sensory deprivation? Fascinatingly, during Padilla’s criminal trial, the judge took judicial note of Padilla’s “mental disability.” Nonetheless, the judge ruled Padilla competent enough to stand trial. In effect this action set aside any and all legal questions regarding the use of prolonged sensory deprivation techniques. Perhaps even more importantly, the judge successfully deflected any further issues regarding the association of torture with sensory deprivation techniques (Richey, 2007, p. 2-3).

As a sidebar to incarcerated defendants’ “mental states,” it is interesting to consider that even after a verdict is rendered, sentencing is complete, and the convicted is relegated to death row, an inmate’s mental condition can dramatically influence the outcome ordered by the court. In the case of Ford v. Wainwright the court ruled that prisoners who mentally decompose, becoming “insane” while incarcerated, cannot be executed (Schmallger, 2006, p. 98). The point is mental status and cognitive capacities will continue to be part of the forensic landscape.

Mental and cognitive concerns related to sensory deprivation techniques continue to be of vital interest to forensic professionals, as evidenced by the work of Stuart Grassian and Angela Hegarty in the federal case of US v. Padilla. It is instructive to examine Padilla’s mental state and cognitive capacity juxtaposed with the law and the effects of enduring prolonged sensory deprivation.

The court affidavit by Dr. Hegarty lays bare Padilla’s psychological deterioration and desolate mental state precipitated by isolation and solitary confinement. Dr. Hegarty reveals that the use of prolonged isolation creates the conditions that induce intense fear, feelings of helplessness, and loss of control characteristic of the traumatic experience (Cryptome, 2006):

Sleep deprivation, physiological stress, and repeated questioning only exacerbate the traumatic nature of the experience. Mr. Padilla believed he was going to die on a number of occasions during his detention. He believed his family would be harmed if he did not comply. He learned that no matter whether he was cooperative, or whether he pleaded with his captors, he was utterly helpless and absolutely dependent on them for everything. He believed and still believes they have the ultimate power to decide what happens in his life, his case, and whether he is released or ultimately is returned to the brig.
These traumatic events were exacerbated by their duration. Additionally, Mr. Padilla’s current environment wherein he is in an unhealthy degree of isolation remains psychologically unsafe for him and only serves to compound the psychological damage that has already been done… With a reasonable degree of medical and psychiatric certainty, it is my opinion that as a result of his experiences during his detention and interrogation, Mr. Padilla does not appreciate the nature and consequences of the proceedings against him, is unable to render assistance to counsel, has impairment in reasoning as the result of mental illness and as such lacks the capacity to assist in his own defense (p. 2-5).

As revealed in the preceding excerpt the forensic professional did not stray into the legal definition of torture as related to sensory deprivation techniques. Instead Dr. Hegarty addresses and clinically observes the effects of sensory deprivation techniques upon Padilla in concert with the environmental conditions Padilla was held in. Further, Dr. Hegarty elects to concentrate on Padilla’s mental status, not the policies, legal wrangling, and politics of a war on terrorism. In her opinion as a forensic expert, Dr. Hegarty candidly concludes that Padilla “was not the same man he was in 2002 and whatever happened to him during his solitary confinement has radically changed him” (Richey, 2007, p. 2).

Of note to forensic professionals in the Padilla case is that Grassian and Hegarty objectively integrated clinical observations, personal history, hours of extensive psychological examinations, and professional opinion into a compelling evaluation. Their written declarations presented to the court are in keeping with U.S. Supreme Court criteria for expert witnesses and Federal Rules of Evidence regarding scientific knowledge and expert testimony based on the seminal case of Daubert v. Merrill Dow Pharmaceuticals Inc (1993) (Luber & Boals 2009, pp. 1-7) as related to: (1) falsifiability (or refutability), (2) peer review, (3) reliability and error rates, and (4) acceptance by the appropriate scientific community (Greene et al., 2007, p.19; Luber & Boals 2009, pp. 1-7).

The forensic evaluations and professional judgments in the Padilla case find merit in judicial, academic, medical, and scientific communities by meeting the criteria for the rules of admissibility in their areas of expertise (validity, reasoning, methodology) (Luber & Boals, 2009, p. 5). This also includes the peer review of forensic data pertaining to devastating effects of sensory deprivation techniques.

Questioning the use of solitary confinement, Atul Gwande in the The New Yorker writes, “it is unclear how many prisoners in solitary confinement become psychotic,” citing Dr. Grassian at length (Gawande, 2009, p. 1):

Stuart Grassian, a Boston psychiatrist, has interviewed more than two hundred prisoners in solitary confinement. In one in-depth study, prepared for a legal challenge of prisoner-isolation practices, he concluded that about a third developed acute psychosis with hallucinations. The markers of vulnerability that he observed in his interviews were signs of cognitive dysfunction – a history of seizures, serious mental illness, mental retardation, illiteracy, or, as in Felton’s case, a diagnosis such as attention-deficit hyperactivity disorder, signaling difficulty with impulse control. In the prisoners Grassian saw, about a third had these vulnerabilities, and these were the prisoners whom solitary confinement had made psychotic. They were simply not cognitively equipped to endure it without mental breakdowns (p. 1).

We would do well to heed concerns about sensory deprivation techniques as they relate to the criminal justice system and counterterrorism efforts. It is evident that sensory deprivation techniques can (and do) have a deleterious impact on the mental status, well-being, and behavior of individuals detained and held in custody.

Nevertheless, there is not a great deal of empirical data to confirm the extent of psychological trauma from sensory deprivation techniques referred to in the literature and case law. However, Sharon Shalev, author...
of A Sourcebook on Solitary Confinement, states there is a “growing body of literature that demonstrates the harmful impact of isolation” and makes the following key points (Shalev, 2008 p. 23):

- There is unequivocal evidence, dating back to the 19th century, demonstrating the negative health effects of solitary confinement.
- The extent of psychological and physiological damage of solitary confinement will depend on the individual prisoner, his background, the context of placement in isolation, its duration, conditions of confinement and degree of mitigation.
- Uncertainty about the expected duration of solitary confinement is likely to increase its adverse effects.
- While some of the health effects of solitary confinement will subside upon its termination, others may persist.
- For these reasons, the use of solitary confinement should be reserved for extreme cases, for as short time as possible, but usually no more than a matter of days.
- The misuse of the psychological and physiological effects of solitary confinement as part of an interrogation process may amount to cruel, inhuman or degrading treatment or punishment and even to torture, and should be prohibited in all circumstances.

The deleterious impact may present unforeseen challenges in administrating justice, ferreting out truth, and establishing facts and circumstances. It is incumbent upon forensic professionals not to lose sight of the dark side of sensory deprivation techniques such as solitary confinement and supermax housing. National Institute of Corrections defined supermax as:

A highly restrictive, high-custody housing unit within a secure facility, or an entire secure facility, that isolates inmates from the general prison population and from each other due to grievous crimes, repetitive assaultive or violent institutional behavior, the threat of escape or actual escape from high-custody facility(s), or inciting or threatening to incite disturbances in a correctional institution.

Jennifer R. Wynn, in her dissertation, Psychopathy in Supermax Max prisons: A New York State Study, undertakes an empirical analysis of data from personally administered surveys of supermax inmates (N = 175) in the country’s fourth largest prison system, the New York State Department of Correctional Services. Her findings underscore the adverse effects of sensory deprivation techniques and the need for more aggressive research (Wynn, 2007, pp. IV-V):

Findings showed that while mentally ill and non-mentally ill supermax inmates resembled each other on correlates of violence in the community and in general population, mentally ill inmates were significantly more likely than other inmates to attempt suicide, engage in self-harm, experience victimization and receive disciplinary infractions for symptomatic behavior. In addition, findings showed that behavior among all inmates worsened rather than improved in supermax.

The hypothesis that mentally ill inmates manifested significantly more behavioral pathology and psychiatric distress in supermax than non-mentally ill inmates was also supported. The effect of mental illness on psychiatric distress was large, with mental illness explaining nearly 50% of the variance. Finally, findings showed that inmates with no mental health problems in the community or in general population manifested symptoms of psychopathology once in supermax.
Wynn's work adds to the current empirical data collected on sensory deprivation. It also highlights the dark side of sensory deprivation techniques. Wynn also found that “a notable percentage of inmates with no mental health history either in prison or the community manifested symptoms of psychiatric deterioration once in supermax” (Wynn, 2007, p. 115):

As noted, over half (56%) reported confused thought processes and problems concentrating; 44% experienced visual and auditory hallucinations; 40% were transferred to a psychiatric unit due to suicidal ideation or suicide attempts; and 20% reported social withdrawal, lethargy and chronic tiredness.
References


CIA (1963), KUBARK counterintelligence interrogation, Washington, D.C: Central Intelligence Agency


Department of the Army (2006), FM 2-22.3 human intelligence collector operations, Washington, DC.


About the Author

GI Wilson is a retired Marine Corps combat veteran with over 40 years of combined experience in military operations and law enforcement. He is a board certified protection professional (CPP) and certified forensic consultant (CFC). He is published in professional journals, appears on national TV and radio, plus has contributed to several books regarding national security. He teaches at the Palomar College and serves as a North San Diego County Gang Commissioner. GI Wilson is a recognized civilian and military subject matter expert regarding maneuver warfare, fourth generation warfare and emerging threats that includes non-state and failed state actors. His particular areas of interest are criminal behavior associated with gangs, psychopathy, criminal enterprises, and terrorism. He holds an undergraduate degree in psychology State University of New York at Albany and master’s degrees in Security Management Webster University, and Forensic Psychology Argosy University.